Fish Use of Stream Drainage Basins in the City of Bellevue

April 2009

Background and Data Sources

Current knowledge of the species of fish in Bellevue's streams and their distribution is based on stream typing work conducted in the summer of 2001 (The Watershed Company 2001) that involved assessing culverts as to whether fish could pass upstream and electrofishing; an electrofishing survey conducted at five sites in the Kelsey Creek basin in 2007 (City of Bellevue, unpublished data) and fish moved prior to sediment removal from two sediment ponds along Coal Creek (The Watershed Company 2007a); salmon spawning surveys conducted annually during the fall between 2001 and 2008 (Taylor Associates 2002; The Watershed Company 2003, 2004, 2005, 2006, 2007b, 2009); and peamouth surveys and spawning observations conducted by Bellevue staff and volunteers between the late 1990s and 2008 (City of Bellevue, unpublished data). Lake Washington shore use by warm water fish was documented by Washington Department of Fish and Wildlife in June of 2005 (Personal Communication, Chad Jackson, July 18, 2007). Fish use of the lake shore along Lake Sammamish has not been documented by the City of Bellevue.

Valley Creek Basin

Historical information shows sockeye, chinook, and coho salmon presence throughout the main stem of Valley Creek (08-0266), upstream as far as the outfall of the 1,087-foot culvert at the Bellevue Municipal Golf Course. The 2007 electrofishing survey found numerous cutthroat trout and coho salmon juveniles, as well as lamprey. Cutthroat are documented in various reaches of Valley Creek and likely use the full corridor to the golf course culvert. Non-native bluegill (*Lepomis macrochirus*) have been documented in the lower reaches of Valley Creek. No fish were found in a 1998 electrofishing survey by The Watershed Company at the upstream end of Valley Creek (Johnston 1998). Unlike downstream areas, this section was characterized by shallow water full of emergent vegetation and organic, muddy substrate. Although it does not support fish, one Pacific giant salamander (*Dicamptodon tenebrosus*) was found.

In 2001, survey efforts at the small tributary adjacent to SR 520 revealed a mostly dry, muddy channel incapable of supporting fish. In contrast, the tributary to the north contained several young cutthroat trout. At the downstream end of this tributary, the stream becomes part of a detention pond. Other than this pond, this segment contains limited flow, and the deepest pools were only eight inches deep. The trout were found upstream of the pond in a pool-riffle sequence.

See Bellevue's Basin Fact Sheet main web page for additional fish use information for Bellevue streams.

References Cited

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